

Amendment
Serial No. 10/671,218

IN THE CLAIMS

Please amend the claim as follows:

1. (Currently Amended) A subscriber optical distributor for a broadcasting-telecommunications convergence service over an FTTH (Fiber To The Home) optical transmission network, said distributor comprising:

an optical transceiver configured to receive an optical TDM (Time Division Multiplex) broadcasting-telecommunications signal, to convert the optical broadcasting-telecommunications signal to an electrical broadcasting-telecommunications signal, and to convert an uplink electrical signal received from a subscriber to an optical signal;

a broadcasting/telecommunications signal distributor configured to receive the electrical broadcasting-telecommunications signal, configured to separate the received, electrical broadcasting-telecommunications signal into a separate broadcasting signal and a separate telecommunications signal, and configured to output the separated broadcasting signal and the separated telecommunications signal to separate destinations;

a broadcasting interface configured to interface with the broadcasting signal received from the broadcasting/telecommunications signal distributor; and

a telecommunications interface configured to interface with the telecommunications signal received from the broadcasting/telecommunications signal distributor, and providing the uplink signal to the optical transceiver,

wherein the subscriber optical distributor is configured to be arranged at a user's location to receive at the user the optical TDM (Time Division Multiplex) broadcasting-telecommunications signal via an optical fiber from an Optical Network Unit (ONU) of the optical transmission network in a Fiber To The Home arrangement.

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2. (Previously Presented) The subscriber optical distributor of claim 1, further comprising a broadcasting controller configured to receive channel selection information regarding the subscriber from the broadcasting interface, and providing the channel selection information to the broadcasting/telecommunications signal distributor, so that only broadcasting data for a selected channel is output.

3. (Original) The subscriber optical distributor of claim 1, wherein the optical transceiver is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

4. (Original) The subscriber optical distributor of claim 2, wherein the optical transceiver is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

5. (Previously Presented) The subscriber optical distributor of claim 3, wherein the VCSEL transceiver comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, for receiving the TDM broadcasting-telecommunications signal; and
a transmitter configured to uplink an Ethernet.

6. (Previously Presented) The subscriber optical distributor of claim 4, wherein the VCSEL transceiver comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

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a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, configured to receive the TDM broadcasting-telecommunications signal; and

a transmitter configured to uplink an Ethernet.

7. (Original) The subscriber optical distributor of claim 1, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separating the time frame data into broadcasting data and Ethernet packet data.

8. (Original) The subscriber optical distributor of claim 2, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separating the time frame data into broadcasting data and Ethernet packet data.

9. (Original) The subscriber optical distributor of claim 3, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal using an internal PLL (Phase Locked Loop), and separating the time frame data into broadcasting data and Ethernet packet data.

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10. (Currently Amended) A method for providing a broadcasting-telecommunications convergence service to a subscriber over an FTTH (Fiber To The Home) optical transmission network, said method comprising:

(a) receiving, at an optical transceiver, an optical TDM (Time Division Multiplex) broadcasting-telecommunications signal from an optical—transceivertransmission network, converting the optical broadcasting-telecommunications signal to an electrical broadcasting-telecommunication signal,

(b) receiving the electrical broadcasting-telecommunications signal that has been converted by the optical transceiver into an electrical signal;

(c) separating the received, electrical broadcasting-telecommunications signal into a separate broadcasting signal and a separate telecommunications signal;

(d) outputting the separated broadcasting signal and the separated telecommunication signal to separate destinations;

(e) interfacing the broadcasting signal with a broadcasting interface;

(f) interfacing the telecommunications signal with the telecommunications interface, and

(g) providing an uplink electrical signal received from a subscriber to the optical transceiver for conversion;

wherein steps (a), (b) and (c) are performed by a subscriber optical distributor which is configured for arrangement at a user's location to receive at the user the optical TDM (Time Division Multiplex) broadcasting-telecommunications signal via an optical fiber from an Optical Network Unit (ONU) of the optical transmission network in a Fiber To The Home arrangement.

11. (Previously Presented) The method according to claim 10, further comprising:

(h) providing a broadcasting controller for receiving channel selection information

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regarding the subscriber from the broadcasting interface, and (i) providing the channel selection information to the broadcasting/telecommunications signal distributor, so that only broadcasting data for a selected channel is output.

12. (Previously Presented) The method according to claim 10, wherein the optical transceiver used in steps (b) and (g) is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

13. (Previously Presented) The method according to claim 11, wherein the optical transceiver used in steps (b) and (g) is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

14. (Original) The method according to claim 12, wherein the VCSEL transceiver used in the method comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, for receiving the TDM broadcasting-telecommunications signal; and

a transmitter for an Ethernet uplink.

15. (Original) The method according to claim 13, wherein the VCSEL transceiver used in the method comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

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a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier for receiving the TDM broadcasting-telecommunications signal; and
a transmitter for an Ethernet uplink.

16. (Original) The method according to claim 10, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separates the time frame data into broadcasting data and Ethernet packet data.

17. (Original) The method according to claim 11, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separates the time frame data into broadcasting data and Ethernet packet data.

18. (Original) The method according to claim 12, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal using an internal PLL (Phase Locked Loop), and separating the time frame data into broadcasting data and Ethernet packet data.